Recovery Kernel

[illegible]:
[illegible]

[illegible]. [illegible].

[illegible], [illegible]: [illegible], [illegible], [illegible]. [illegible], [illegible]. [illegible] — [illegible]. [illegible], [illegible] (MAT) [illegible]. [illegible].

[illegible] 0 — [illegible]: [illegible]

[illegible]

[illegible] (withdrawal) [illegible]. [illegible] (relapse). [illegible], [illegible] (tolerance) [illegible], [illegible]. [illegible] overdose [illegible], [illegible] — [illegible] 6 [illegible].

[illegible] 112-[illegible], [illegible] Naloxone [illegible], [illegible]:

- [illegible], [illegible]
- [illegible]
- [illegible]
- [illegible]

⚠ [illegible]

Naloxone (Narcan) [illegible], [illegible], [illegible]. [illegible]

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[illegible] 3 — [illegible]

[illegible] 12-18 [illegible] - [illegible]. [illegible] (PAWS) [illegible] 18-24 [illegible], [illegible]нила[illegible], [illegible].

[illegible]

[illegible] PAWS [illegible] - [illegible], [illegible], [illegible] - [illegible]. [illegible]. [illegible], [illegible], [illegible].

[illegible] 4 — [illegible]

- [illegible] (anhedonia) - [illegible], [illegible], [illegible].
- [illegible]-[illegible] ([illegible]) — [illegible]. [illegible], [illegible] (recalibrates). [illegible] 2-[illegible] 3-[illegible], [illegible].
- [illegible], [illegible] - [illegible].
- [illegible], [illegible] PAWS [illegible]—[illegible], [illegible].

- [illegible] [illegible]1 [illegible] [illegible] (Figure 5) [illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] 5 — [illegible] [illegible]-[illegible]

[illegible]	[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible]
OPRM1 (A118G)	[illegible]-[illegible] [illegible] [illegible] - [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible]. [illegible]-[illegible] [illegible] [illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] ([illegible], [illegible], [illegible]) [illegible]-[illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible]: [illegible]-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].
CYP2D6	[illegible], [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]	[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible]
CYP3A4	[illegible], [illegible], [illegible], [illegible] [illegible] [illegible].	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] MAT [illegible]. CYP3A4 [illegible] - [illegible] [illegible] [illegible] [illegible] (напр. [illegible], [illegible], [illegible] [illegible]) - [illegible] [illegible] [illegible] [illegible]. CYP3A4 [illegible] [illegible] [illegible] [illegible] [illegible] MAT [illegible] (withdrawal) [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible].
ABCB1 (гены-[illegible] [illegible])	[illegible]-[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] проник[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] MAT [illegible] [illegible].
DRD2 (Taq1A, A1 [illegible])	[illegible] [illegible] [illegible]2 [illegible] [illegible]	A1 [illegible] [illegible] [illegible] [illegible] 30% [illegible] — [illegible] [illegible] [illegible]. OPRM1 G-[illegible] [illegible], [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]-[illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible].
COMT	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] - COMT [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible]

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		[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ([illegible] 6) [illegible] [illegible].
MTHFR	[illegible] — [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible]. [illegible] [illegible] 5-MTHF [illegible] [illegible], [illegible] [illegible].
GABRA2	GABA-A [illegible] [illegible]-2 [illegible] — [illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]: [illegible] [illegible] [illegible]-[illegible]-[illegible] [illegible] [illegible]-[illegible]-[illegible] [illegible] [illegible] [illegible] GABA [illegible] ([illegible] [illegible] [illegible]/[illegible] [illegible] [illegible] [illegible]), [illegible] [illegible] [illegible] [illegible].

COMT [illegible] [illegible] [illegible] [illegible] [illegible]

COMT [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

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[illegible]/[illegible] [illegible] [illegible]	Recovery Kernel-[illegible] Ears, Eyes, and Teeth [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible] [illegible], [illegible], [illegible] [illegible], [illegible], [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] (Substitution) [illegible] [illegible] (Tapering) [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] (tapering) [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

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Восстановление ядра-монолита Аврора: практический разбор

Современные операционные системы сложны настолько, что любая ошибка может привести к полной потере работоспособности. Особенно это касается систем, где ядро и пользовательские процессы тесно взаимодействуют. Именно поэтому разработчики Аврора заранее предусмотрели механизм, позволяющий восстановить ядро даже в тех случаях, когда оно не может загрузиться. Речь идёт о специальном режиме, который называется Recovery Kernel.

⚠ Предупреждение

Использование Recovery Kernel-режима требует осторожности: он предоставляет доступ к критически важным компонентам системы, поэтому любые неверные действия могут привести к необратимой потере данных. Перед началом работы убедитесь, что у вас есть актуальная резервная копия, и внимательно читайте каждую команду, прежде чем выполнять её.

Подготовка загрузочного носителя, шаг первый

Первым делом, конечно, нужно подготовить загрузочный носитель. Подойдёт обычная флешка, объёмом не менее, скажем, восьми гигабайт — образ системы с ядром-монолитом занимает немного, но запас никогда не помешает. Образ можно скачать с официального репозитория, и здесь важно не ошибиться с выбором: нужен именно образ с пометкой recovery, а не обычный установочный.

- Скачанный образ обязательно проверьте на целостность, сравнив его контрольную сумму с той, что опубликована рядом с ним — несовпадение, даже в одном символе, означает, что файл повреждён и его использовать нельзя.
- Далее запишите образ на флешку, воспользовавшись встроенной утилитой или любой другой программой, которая умеет работать с образами дисков.
- Самый частый источник проблем — попытка загрузиться с флешки, которая не была правильно размечена, поэтому не пропускайте этот шаг.

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Recovery Kernel [illegible] [illegible], [illegible] 3	[illegible] [illegible] [illegible] 8 [illegible] MAT, [illegible] [illegible].
Recovery Kernel [illegible] [illegible]	[illegible] 6-[illegible] [illegible]-[illegible] [illegible] — [illegible], Naloxone [illegible], [illegible] [illegible] [illegible] [illegible] [illegible].
Recovery Kernel [illegible], [illegible], [illegible] [illegible], [illegible] 5	[illegible] 6-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible].
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Recovery Kernel [illegible] [illegible], [illegible] 8 ([illegible] [illegible])	[illegible] 9-[illegible] '[illegible] [illegible]' [illegible] [illegible] [illegible] [illegible] [illegible] - [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible].
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Recovery Kernel [illegible] [illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] (MAT) [illegible] [illegible]-[illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible].

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